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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/137,393	08/20/1998	PIJUSH K. DEWANJEE	DSCK-525-C3	2824

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EXAMINER

SERGEANT, RABON A

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 03/26/2002

20

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/137,393

Applicant(s)  
Dewanjee et al.

Examiner  
Rabon Sergeant

Art Unit  
1711



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Dec 26, 2001.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 30-33 and 36-47 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30-33 and 36-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 20) ☐ Other: \_\_\_\_\_

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1. Claims 41 and 42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 41 and 42 are drawn to the same subject matter.

2. Claims 30-33, 36-42, and 44-47 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Applicants have failed to specify the type (weight average or number average) of the molecular weight for the polyol.

3. Claims 30-33 and 36-47 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Applicants have failed to indicate the type of hardness claimed. Are the hardness values Shore hardness values, for example?

4. Claims 30, 31, 33, 36-40, and 44-47 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the production of golf ball covers using polyoxytetramethylene polyol, does not reasonably provide enablement for the production of golf

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ball covers using virtually any ether glycol. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. Despite applicants' response, the position is maintained that applicants have failed to provide adequate teaching to permit one of ordinary skill in the art to produce viable golf ball covers using polyols other than the aforementioned polyoxytetramethylene polyol. The only guidance that applicants provide concerning the use of other polyols is a statement at page 14 that states that "unlike urethane elastomers made with other ether polyols, e.g., polypropylene ether glycol, urethane elastomers made with PTMEG exhibit superior dynamic properties such as coefficient of restitution (COR) and Bashore rebound". Applicants further state that the polyol used in accordance with the present invention corresponds to a polyoxytetramethylene polyol. These statements in no way provide guidance for the use of other polyols.

5. Claims 44-46 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the production of golf ball covers using diethyl-2,4-toluenediamine and dimethylthio-2,4-toluenediamine, does not reasonably provide enablement for the production of golf ball covers using virtually any blend of differently reacting diamines. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. Despite applicants' response, the specification fails to provide adequate guidance for the selection of suitable blends

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of differently reacting diamines that will yield suitable golf ball covers having viable processing characteristics. Given the many variables involved in selecting a suitable blend of curing agents, such as species and numbers of suitable substituents, applicants have provided no support for their statement that undue experimentation would not be required. The only practical guidance provided by applicants stems from page 11 of the specification, wherein applicants state that the curing agents of the present invention are substantially Ethacure 300 and Ethacure 100.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

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7. Claims 30-33 and 36-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. ('852) or GB 2301291, each in view of Wu ('673) and Isaac ('568) and Presswood ('298).

The primary references disclose the production of thread wound-solid center golf balls, wherein the winding and center are comprised of components which are equivalent to those claimed by applicants. See columns 2-5 and tables within Kato et al. See pages 7-9 and examples within GB 2301291.

8. While the primary references are largely silent regarding the use of polyurethane covers, the use of such covers utilizing applicants' claimed prepolymer and blends of curing agents having different reactivities was known at the time of invention. Wu discloses the use of prepolymers based on diisocyanates and polytetramethylene ether glycol and a slow reacting polyamine, such as 3,5-dimethylthio toluene diamine. See column 2. Isaac discloses the production of golf balls having polyurethane covers, wherein the polymerization cycle is interrupted through the use of blends of curing agents having different reactivities, so as to permit a center to be introduced into a semi-cured golf ball cover half which is then mated with the other half and cured. See abstract and columns 2 and 3. Furthermore, the claimed hardness values are considered to be inherent features of the polyurethane covers of these references, since it is logical to conclude that viable covers would have to possess comparable ranges of hardness in order to perform acceptably.

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9. Though Isaac fails to disclose applicants' specific blend of fast and slow reacting diamines, the use of blends of diethyl toluene diamine with 3,5-dimethylthio toluene diamine to produce polyurethane molding compositions having controlled reaction profiles and improved properties was known at the time of invention. This position is supported by the teachings of Presswood at columns 2-4. Presswood further discloses the relative reactivities of the specified chain extenders.

10. Therefore, since it was known to employ blends of curing agents having different reactivities for the production of polyurethane golf ball covers and since it was known to employ diamines of the nature claimed by applicants to cure moldable prepolymers analogous to those claimed, it would have been obvious to one of ordinary skill in the art to utilize the curing agent blend of Presswood with the prepolymer of Wu in accordance with the teachings of Isaac, so as to obtain a golf ball cover composition suitable for use with the wound cores of the primary references.

11. The examiner has considered applicants' response; however, applicants have failed to elaborate on their statement that the references fail to teach each and every limitation. The position is taken that applicants have failed to appreciate and address the combined teachings of the references. Additionally, with respect to Presswood, it is noted that applicants' claims are drawn to a product; therefore, arguments pertaining to the processing of the polyurethane, i.e., RIM versus casting, are not considered to be relevant to the claims as drafted.

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12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.

R. Sergent

March 24, 2002

  
**RABON SERGENT**  
**PRIMARY EXAMINER**